

WHAT WE CLAIM IS:

1. A seat position detection device comprising ;
a detection means for detecting physical relationship between a stationary
5 rail supported by a vehicle body and a movable rail rigidly connecting a seat and
sliding along the stationary rail;
the detection means includes a magnetic body provided at one of the
stationary rail and the movable rail and a magnetic sensor provided at the other
of the stationary rail and the movable rail, and the magnetic body is arranged at
10 an entire length of a specified region in sliding direction of the movable rail, and
a magnetic pole thereof is directed perpendicular to the slide direction, and the
magnetic sensor outputs a signal in response to magnetism from the magnetic
body.
- 15 2. A seat position detection device according to claim 1, wherein a sliding
range of the seat is divided into two regions, and the magnetic body is attached
to one of the divided region so that the magnetic sensor faces to one of the N
pole and the S pole thereof.
- 20 3. A seat position detection device according to claim 1, wherein the sliding
range of the seat is divided into two regions, and the magnetic body includes two
portions which are attached to one of the divided portion so that the magnetic
sensor faces to one of the N pole and the S pole thereof, respectively.
- 25 4. A seat position detection device according to claim 1, wherein the magnetic
body is not exposed outside of the fixed rail or movable rail.
5. A seat position detection device according to claim 1, wherein the magnetic
body is shaped as a sheet.
- 30 6. A seat position detection device according to claim 1, wherein the magnetic
body is attached to one of the stationary rail and the movable rail by magnetic
attraction.
- 35 7. A seat position detection device according to claim 1, wherein the magnetic
sensor includes a Hall element for outputting a signal according to magnetic flux

density and a switching circuit for outputting a signal when a voltage level of the signal from the Hall element exceeds a predetermined value.

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